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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/659,568

Applicant(s)

CHEN ET AL.

Examiner

AMELIA RUTLEDGE

Art Unit

2176

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-9, 11-14, 16-28 and 30-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-4, 6-9, 11-13, 33, and 34 is/are allowed.
- 6) ☒ Claim(s) 14, 16-28, 30-32, 35 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to communications: Amendment, filed 06/12/2008; Amendment to Specification, filed 06/12/2008.
2. Claims 1-4, 6-9, 11-14, 16-28, and 30-36 are pending. Claims 1, 14, and 23 are independent claims.
3. The amendment to the Specification filed 06/12/2008 has been received and will be entered.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 23-28, 30-32, and 36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding independent claim 23, claim 23 recites: *One or more computer-readable media containing computer-executable instructions that, when executed on a computer, cause the computer to perform the following steps comprising...*

An amendment to the Specification, replacing the paragraph beginning at page 7, line 4, recites in part, "Communication media typically embodies computer readable instructions, data structures, program modules, or other data in an information delivery media. Combinations of wireless media such as acoustic, RF, infrared, and other wireless media with any of the above are also included within the scope of computer readable media." (The Specification previously defined computer readable media as

including signals.) Pursuant to the amendment to the Specification, the computer readable media claimed in claim 23 remains non-statutory, and is not tangibly embodied on computer hardware, since the amendment to the Specification discloses, for example, the combination of "wireless media" with "data structures", which results in non-statutory subject matter. Amending the Specification to limit the computer readable media to computer hardware, or positively reciting the tangible embodiment of the invention on computer hardware in the claim, are possible ways of overcoming the rejection under 35 U.S.C. 101.

While claim 23 does recite, at line 22, *providing results of the search via an output peripheral device*, the preamble of the claim recites *computer-executable instructions that, when executed on a computer, cause the computer to perform the following steps...* Since the claimed *computer readable media* of the preamble is directed to non-statutory subject matter, and the claim does not positively recite that all of the instruction steps must be executed, but rather recites the conditional "*when executed*"; the step of *providing results of the search via an output peripheral device* is non-statutory.

Regarding dependent claims 24-28, 30-32, and 36, claims 24-28, 30-32, and 36 are rejected because they do not add limitations which would render the claimed subject matter statutory.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 14, 19-24, 26-28, and 30-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price et al. ("Price"), "Linking By Inking: Trailblazing in a Paper-like Hypertext", *HyperText* 98, Pittsburgh, PA, copyright ACM 1998, p. 30-39, in view of Moran et al. ("Moran"), U.S. Patent No. 6,509,912 B1, issued January 2003, and further in view of Farrett, U.S. Patent No. 7,107,261 B2, issued September 2006.**

Regarding independent claim 14, Price teaches XLibris, a hypertext system using a paper document metaphor, i.e., an electronic document. Price teaches monitoring an electronic document for user annotations and recognizing entry of an annotation into the electronic document (p. 32, Fig. 2; p. 33, Col. 1, par. 2; p. 33, Col. 2, par. 4) because as a reader annotates a document the system performs queries and displays links to related pages (Fig. 3). The queries locate documents related to the annotation using the annotation and context data proximal to the annotation, because each annotation is interpreted as a text selection and transformed into a list of word weights (p. 34, Col. 2, par. 5-p. 35, Col. 1, par. 2). Also see p. 35, "Ink Anchors", where annotations are used to contextually link to nearby annotations or relevant annotations. Price teaches search and extraction modules (p. 35-36, "Implementation").

While Price discloses an electronic ink system, Price does not explicitly teach a feature database configured to store a gesture comprising an ink object commanding user defined functionality of the system; however, Moran teaches a freeform graphics system which stores a gesture comprising an ink object, called a domain object, representing a user defined function (col. 8, l. 1-63; col. 9, l. 35-65; col. 11, l. 48-col. 12, l. 40; col. 12, l. 14-17). Moran teaches storing the domain objects in a database (col. 6, l. 5-19).

Price teaches determining keywords that are likely to be of interest to a user based on words contained in documents previously accessed by the user, because Price teaches that tapping on a source ink anchor, i.e., annotation, produces a list of clippings that contain matching target ink anchors, or clippings of documents that correspond to multiple annotations made by the reader (p. 35, "Ink Anchors", especially Col. 1, par. 7). Price teaches determining keywords from annotations made by the user and determining keywords that are likely to be of interest to a user based on the annotation and words contained in documents previously accessed by the user, since Price teaches that the system generates further reading lists for each document and that readers can access views that show a list of links to related documents, as well as document clippings (p. 34-35); compare to determining keywords that are likely to be of interest to a user based on words contained in documents previously accessed by the user.

While Price does not explicitly teach that the history module includes one or more historical keywords that were previously used, and that the extraction module weights

keywords according to whether or not the keywords are included in the history module, Farrett teaches a client side search engine which retains a history record of search terms which is updated and refined, and further assigning a weighted probability category to a keyword that matches the search term keyword (col. 1, l. 40-col. 2, l. 36). Farrett teaches weighting each search term according to whether a particular search term is included in the history of search terms, a higher weight being assigned to a search term that is included in the history of search terms (col. 4, l. 9-col. 5, l. 5; claim 1). While Price teaches that the information processing module is further configured to locate the related content based on the annotation, the one or more keywords from the context data, and the weighted keywords (p. 34-35), Price does not explicitly teach that the keywords are weighted according to whether or not the keywords are included in the history module, however, Farrett teaches a client side search engine which retains a history record of search terms which is updated and refined, and further assigning a weighted probability category to a keyword that matches the search term keyword (col. 1, l. 40-col. 2, l. 36). Farrett teaches weighting each search term according to whether a particular search term is included in the history of search terms, a higher weight being assigned to a search term that is included in the history of search terms (col. 4, l. 9-col. 5, l. 5; claim 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the hypertext ink annotation system taught by Price, with the domain objects representing electronic ink gestures with user defined functionality disclosed by Moran, and the client side search engine with history record disclosed by

Farrett, since the ink objects, search engine, and annotation system, were all known prior art elements that could have been combined to produce predictable results. Moran, at col. 4, l. 54-col. 5, l. 8, notes that "any freeform editing program may incorporate the present invention", such as a pen-based graphics system, which suggests that it would have been obvious to combine Moran with Price and Farrett. Farrett, at col. 5, l. 43-49, noted that the disclosed search system was applicable to a variety of knowledge bases, and could be adapted to other applications, which suggests that it would have been obvious to combine Farrett with Price and Moran, since Price disclosed a database of annotations, and Moran also disclosed a database of domain objects.

Regarding dependent claim 19, Price teaches extracting keywords from text near to the annotation (p. 34, Col. 1, par. 2-3).

Regarding dependent claim 20, while Price in view of Farrett does not explicitly teach that the related content located by the information processing module comprises documents on a network that contain one or more of the keywords, it would have been obvious to one of ordinary skill in the art at the time of the invention to adapt the system to operate to access documents on a network, since searching documents on a network was well known in the art at the time of the invention, as disclosed by Farrett at col. 1, l. 13-15.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the hypertext ink annotation system taught by Price, with the domain objects associated with time disclosed by Moran, and the client side search

engine with history record disclosed by Farrett, since the domain objects, search engine, and annotation system, were all known prior art elements that could have been combined to produce predictable results. Moran, at col. 4, l. 54-col. 5, l. 8, notes that "any freeform editing program may incorporate the present invention", such as a pen-based graphics system, which suggests that it would have been obvious to combine Moran with Price and Farrett. Farrett, at col. 5, l. 43-49, noted that the disclosed search system was applicable to a variety of knowledge bases, and could be adapted to other applications, which suggests that it would have been obvious to combine Farrett with Price and Moran, since Price disclosed a database of annotations, and Moran also disclosed a database of domain objects.

Regarding dependent claim 21, Price teaches that tapping on a source ink anchor, i.e., annotation, produces a list of clippings that contain matching target ink anchors, or clippings of documents that correspond to multiple annotations made by the reader (p. 35, "Ink Anchors", especially Col. 1, par. 7). Price teaches determining keywords from annotations made by the user; Price teaches classifying annotations into several categories which are designated by user input of a gesture, including circled phrases, underlines, highlights, circled passages, and margin bars, and Price teaches that the selections are then converted into queries and links are computed through a full text search (p. 34, col. 1, par. 2-5).

Regarding dependent claim 22, while Price does not explicitly teach a user interface configured to present keywords to the user and provide for selection of none or

one or more of the keywords by the user, Farrett teaches displaying keywords to the user for selection in a user interface (col. 5, l. 1-50).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the hypertext ink annotation system taught by Price, with the domain objects associated with time disclosed by Moran, and the client side search engine with history record disclosed by Farrett, since the domain objects, search engine, and annotation system, were all known prior art elements that could have been combined to produce predictable results. Moran, at col. 4, l. 54-col. 5, l. 8, notes that "any freeform editing program may incorporate the present invention", such as a pen-based graphics system, which suggests that it would have been obvious to combine Moran with Price and Farrett. Farrett, at col. 5, l. 43-49, noted that the disclosed search system was applicable to a variety of knowledge bases, and could be adapted to other applications, which suggests that it would have been obvious to combine Farrett with Price and Moran, since Price disclosed a database of annotations, and Moran also disclosed a database of domain objects.

Regarding independent claim 23, Price teaches XLibris, a hypertext system using a paper document metaphor, i.e., an electronic document. Price teaches monitoring an electronic document for user annotations and recognizing entry of an annotation into the electronic document (p. 32, Fig. 2; p. 33, Col. 1, par. 2; p. 33, Col. 2, par. 4) because as a reader annotates a document the system performs queries and displays links to related pages (Fig. 3). The queries locate documents related to the annotation using the annotation and context data proximal to the annotation, because

each annotation is interpreted as a text selection and transformed into a list of word weights (p. 34, Col. 2, par. 5-p. 35, Col. 1, par. 2). Also see p. 35, "Ink Anchors", where annotations are used to contextually link to nearby annotations or relevant annotations.

While Price does not explicitly teach that the annotations are associated with a date, Moran teaches a freeform graphics system *determining whether the annotation is associated with a date*; because Moran teaches that electronic ink domain objects can have time attributes, as well as events and durations (col. 19, l. 8-col. 20, l. 3; col. 14, l. 1-34), and teaches determining time dependent values and system events based on the current time (col. 12, l. 41-68). Moran teaches *responsive to determining the annotation is associated with a date, determining if a date launch feature is enabled, such that: in an event no date launch feature is enabled, monitoring the electronic document for additional user annotations; in an event the date launch feature is enabled, launching an associated application*; because Moran discloses computing the remaining time on an agenda item, so that when the remaining time reaches a warning value, an audio indicator such as a bell is activated, and a visual indicator such as a time pane is activated (col. 19, l. 8-col. 20, l. 3). Moran teaches that if no time attribute is present, monitoring the electronic document for additional user annotations (col. 2, l. 28-56; col. 7, l. 25-col. 8, l. 49). While Moran discloses a "time", rather than a "date", it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the same techniques to associate the annotation with a date, because a time is more specific than a date, and since at the time of the invention, computer system clocks and

timestamps included the date as well as the time, for example, Moran discloses recording a time due for an action item (col. 14, l. 1-2).

Price teaches that tapping on a source ink anchor, i.e., annotation, produces a list of clippings that contain matching target ink anchors, or clippings of documents that correspond to multiple annotations made by the reader (p. 35, "Ink Anchors", especially Col. 1, par. 7). Price teaches determining keywords from annotations made by the user. Price teaches classifying annotations into several categories which are designated by user input of a gesture, including circled phrases, underlines, highlights, circled passages, and margin bars, and Price teaches that the selections are then converted into queries and keywords and related text links are computed through a full text search (p. 34, col. 1, par. 2-5); compare to determining keywords that are likely to be of interest to a user based on words contained in documents previously accessed by the user.

Price teaches that annotations that select a phrase result in weighted queries based on the entire surrounding sentence with the emphasis on the selected words (p. 34, Col. 1, par. 2-4), resulting in a query for a search with words indicated by the annotation and keywords derived from the context, i.e. search terms selected from one or more words indicated by the annotation. While Price does not explicitly teach a keyword history list, Farrett teaches a client side search engine which retains a history record of search terms which is updated and refined, and further assigning a weighted probability category to a keyword that matches the search term keyword (col. 1, l. 40-col. 2, l. 36). Farrett teaches weighting each search term according to whether a particular search term is included in the history of search terms, a higher weight being

assigned to a search term that is included in the history of search terms (col. 4, l. 9-col. 5, l. 5; claim 1). Price teaches providing results of the search via an output device.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the hypertext ink annotation system taught by Price, with the domain objects associated with time disclosed by Moran, and the client side search engine with history record disclosed by Farrett, since the domain objects, search engine, and annotation system, were all known prior art elements that could have been combined to produce predictable results. Moran, at col. 4, l. 54-col. 5, l. 8, notes that "any freeform editing program may incorporate the present invention", such as a pen-based graphics system, which suggests that it would have been obvious to combine Moran with Price and Farrett. Farrett, at col. 5, l. 43-49, noted that the disclosed search system was applicable to a variety of knowledge bases, and could be adapted to other applications, which suggests that it would have been obvious to combine Farrett with Price and Moran, since Price disclosed a database of annotations, and Moran also disclosed a database of domain objects.

Regarding dependent claim 24, Price teaches that an plurality of types of annotations are recognized, including a circled phrase (p. 34, par. 2), an underline, an arrow, and a handwritten character (Fig. 2). While Price does not explicitly teach a bracket or post-it note, Moran teaches domain objects which are customizable icons, which would allow the user to customize her own types of annotations. Moran teaches a freeform graphics system which stores a domain object, representing a user defined annotation (col. 8, l. 1-63; col. 9, l. 35-65; col. 11, l. 48-col. 12, l. 40; col. 12, l. 14-17).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the hypertext ink annotation system taught by Price, with the domain objects associated with time disclosed by Moran, and the client side search engine with history record disclosed by Farrett, since the domain objects, search engine, and annotation system, were all known prior art elements that could have been combined to produce predictable results. Moran, at col. 4, l. 54-col. 5, l. 8, notes that "any freeform editing program may incorporate the present invention", such as a pen-based graphics system, which suggests that it would have been obvious to combine Moran with Price and Farrett. Farrett, at col. 5, l. 43-49, noted that the disclosed search system was applicable to a variety of knowledge bases, and could be adapted to other applications, which suggests that it would have been obvious to combine Farrett with Price and Moran, since Price disclosed a database of annotations, and Moran also disclosed a database of domain objects.

Regarding dependent claim 26, Price teaches locating keywords on the target page, which may be a page of the document (p. 34, par. 1).

Regarding dependent claim 27 while Price in view of Farrett does not explicitly teach that the related content located by the information processing module comprises documents on a network that contain one or more of the keywords, it would have been obvious to one of ordinary skill in the art at the time of the invention to adapt the system to operate to access documents on a network, since searching documents on a network was well known in the art at the time of the invention, as disclosed by Farrett at col. 1, l. 13-15.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the hypertext ink annotation system taught by Price, with the domain objects associated with time disclosed by Moran, and the client side search engine with history record disclosed by Farrett, since the domain objects, search engine, and annotation system, were all known prior art elements that could have been combined to produce predictable results. Moran, at col. 4, l. 54-col. 5, l. 8, notes that "any freeform editing program may incorporate the present invention", such as a pen-based graphics system, which suggests that it would have been obvious to combine Moran with Price and Farrett. Farrett, at col. 5, l. 43-49, noted that the disclosed search system was applicable to a variety of knowledge bases, and could be adapted to other applications, which suggests that it would have been obvious to combine Farrett with Price and Moran, since Price disclosed a database of annotations, and Moran also disclosed a database of domain objects.

Regarding dependent claim 28, Price teaches that tapping on a source ink anchor, i.e., annotation, produces a list of clippings that contain matching target ink anchors, or clippings of documents that correspond to multiple annotations made by the reader (p. 35, "Ink Anchors", especially Col. 1, par. 7; Fig. 6). Price teaches determining keywords from annotations made by the user.

Regarding dependent claims 30-32, while Price does not explicitly teach weighting and ranking the search terms, where the search terms were previously used by a user or group of users, Farrett teaches a client side search engine which retains a history record of search terms which is updated and refined, and further assigning a

weighted probability category to a search term that matches the search term keyword (col. 1, l. 40-col. 2, l. 36). Farrett teaches weighting each search term according to whether a particular search term is included in the history of search terms, a higher weight being assigned to a search term that is included in the history of search terms (col. 4, l. 9-col. 5, l. 5; claim 1). Farrett teaches that a history of search terms can also be applied to a knowledge base, therefore comprising a history of search terms used by all users of a particular group of users, i.e., the users of the knowledge base (col. 5, l. 37-49), and teaches that the system can be used for a variety of applications, thus teaching and suggesting a history list for a user or group of users.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the hypertext ink annotation system taught by Price, with the domain objects associated with time disclosed by Moran, and the client side search engine with history record disclosed by Farrett, since the domain objects, search engine, and annotation system, were all known prior art elements that could have been combined to produce predictable results. Moran, at col. 4, l. 54-col. 5, l. 8, notes that "any freeform editing program may incorporate the present invention", such as a pen-based graphics system, which suggests that it would have been obvious to combine Moran with Price and Farrett. Farrett, at col. 5, l. 43-49, noted that the disclosed search system was applicable to a variety of knowledge bases, and could be adapted to other applications, which suggests that it would have been obvious to combine Farrett with Price and Moran, since Price disclosed a database of annotations, and Moran also disclosed a database of domain objects.

Regarding dependent claim 33, Price teaches detecting user input of a gesture that is associated with a search task; wherein the locating information related to the annotation using the annotation and the context data is performed responsive to the detecting, since Price teaches classifying annotations into several categories which are designated by user input of a gesture, including circled phrases, underlines, highlights, circled passages, and margin bars, and Price teaches that the selections are then converted into queries and links are computed through a full text search (p. 34, col. 1, par. 2-5).

Regarding dependent claim 34, Price teaches assigning, by the user, the search task to the gesture so as to associate the gesture with the search task, since Price teaches classifying annotations into several categories which are designated by user input of a gesture, including circled phrases, underlines, highlights, circled passages, and margin bars, and Price teaches that the selections are then converted into queries and links are computed through a full text search (p. 34, col. 1, par. 2-5).

Regarding dependent claim 35, Price teaches that the information processing module is further configured to perform a search to locate the related content responsive to when the annotation monitoring module detects user input of a gesture that is associated with a search task, because Price teaches classifying annotations into several categories which are designated by user input of a gesture, including circled phrases, underlines, highlights, circled passages, and margin bars, and Price teaches that the selections are then converted into queries and links are computed through a full text search (p. 34, col. 1, par. 2-5).

Regarding dependent claim 36, Price teaches detecting user input of a gesture that is associated with a search task; wherein the locating additional content that may be of interest to the user by executing a search is performed responsive to the detecting, because Price teaches classifying annotations into several categories which are designated by user input of a gesture, including circled phrases, underlines, highlights, circled passages, and margin bars, and Price teaches that the selections are then converted into queries and links are computed through a full text search (p. 34, col. 1, par. 2-5).

6. **Claims 16-18 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Moran, and further in view of Farrett, as applied to the claims above, and further in view of Haveliwala et al. (“Haveliwala”), “Evaluating Strategies for Similarity Search on the Web”, WWW2002, May 2002, p. 432-442.**

Regarding dependent claim 16, while The combination of Price, Moran, and Farrett teaches interpreting each annotation as a text selection transformed into a list of word weights, The combination of Price, Moran, and Farrett does not explicitly teach weighting each keyword according to a relative distance that the keyword is from the annotation. Haveliwala teaches defining a relative distance from an anchor by setting a bounding window size and selecting the keywords within (p. 435, Sect. 3.1). Haveliwala teaches weighting terms, i.e., keywords, based on their distance from the anchor (p. 437, Sect. 5.2, par. 1) with terms having a greater weight according to the relative

distance from the anchor, as shown in the logarithmic calculation. Haveliwala teaches locating relevant documents related to the anchor utilizing the weighted keywords and locating the related content based on the weighted keywords as weighted according to the relative distance that each keyword is from the annotation (p. 436, Sect. 3.3; p. 435, Sect. 3.1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have applied the relevancy algorithm disclosed by Haveliwala to the combination of Price, Moran, and Farrett, based on the rationale of applying a known technique to a known product ready for improvement to yield predictable results (KSR). The combination of Price, Moran, and Farrett disclosed a search engine using weighted keywords, the "base" device, and Haveliwala disclosed a relevancy algorithm accounting for relative distance of words, a known technique that would have been applicable to the "base" search engine. One of ordinary skill in the art at the time of the invention would have recognized that applying the known technique (Haveliwala) would have yielded predictable results and resulted in an improved system, because Haveliwala published timing results for the algorithm, p. 440, and pointed out that the quality of retrieved documents by the algorithm was improved over commercial search engines because the algorithm would return topically similar results, rather than results based on navigation (Section 7.2).

Regarding dependent claims 17 and 18, The combination of Price, Moran, and Farrett teaches that the results of the search are re-ranked according to the weighted keywords, and that the search is performed using a query derived from the annotation

and the weighted keywords, since Price teaches monitoring an electronic document for user annotations and recognizing entry of an annotation into the electronic document (p. 32, Fig. 2; p. 33, Col. 1, par. 2; p. 33, Col. 2, par. 4) because as a reader annotates a document the system performs queries and displays links to related pages (Fig. 3).

The queries locate documents related to the annotation using the annotation and context data proximal to the annotation, because each annotation is interpreted as a text selection and transformed into a list of word weights (p. 34, Col. 2, par. 5-p. 35, Col. 1, par. 2). Farrett teaches weighting each search term according to whether a particular search term is included in the history of search terms, a higher weight being assigned to a search term that is included in the history of search terms (col. 4, l. 9-col. 5, l. 5; claim 1). Haveliwala teaches locating relevant documents related to the anchor utilizing the weighted keywords and locating the related content based on the weighted keywords as weighted according to the relative distance that each keyword is from the annotation (p. 436, Sect. 3.3; p. 435, Sect. 3.1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have applied the relevancy algorithm disclosed by Haveliwala to the combination of Price, Moran, and Farrett, based on the rationale of applying a known technique to a known product ready for improvement to yield predictable results (KSR). The combination of Price, Moran, and Farrett disclosed a search engine using weighted keywords, the "base" device, and Haveliwala disclosed a relevancy algorithm accounting for relative distance of words, a known technique that would have been applicable to the "base" search engine. One of ordinary skill in the art at the time of the

invention would have recognized that applying the known technique (Haveliwala) would have yielded predictable results and resulted in an improved system, because Haveliwala published timing results for the algorithm, p. 440, and pointed out that the quality of retrieved documents by the algorithm was improved over commercial search engines because the algorithm would return topically similar results, rather than results based on navigation (Section 7.2).

Regarding dependent claim 25, while The combination of Price, Moran, and Farrett teaches a hypertext application, Price does not explicitly teach locating objects near to an annotation object in a document object model (DOM) associated with the annotation. However, Haveliwala teaches locating text objects near to an anchor object, in an associated DOM of a hypertext document (p. 433, par. 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have applied the relevancy algorithm disclosed by Haveliwala to the combination of Price, Moran, and Farrett, based on the rationale of applying a known technique to a known product ready for improvement to yield predictable results (KSR). The combination of Price, Moran, and Farrett disclosed a search engine using weighted keywords, the "base" device, and Haveliwala disclosed a relevancy algorithm accounting for relative distance of words, a known technique that would have been applicable to the "base" search engine. One of ordinary skill in the art at the time of the invention would have recognized that applying the known technique (Haveliwala) would have yielded predictable results and resulted in an improved system, because Haveliwala published timing results for the algorithm, p. 440, and pointed out that the

quality of retrieved documents by the algorithm was improved over commercial search engines because the algorithm would return topically similar results, rather than results based on navigation (Section 7.2).

Allowable Subject Matter

Claims 1-4, 6-9, 11-13, 33, and 34 are allowed.

Response to Arguments

Applicant's arguments with respect to claims 14, 16-28, 30-32, 35, and 36 have been considered but are moot in view of the new ground(s) of rejection. The new grounds of rejection includes the Moran patent, which is being relied upon to teach the newly claimed limitations of independent claims 14 and 23:

...a feature database configured to store a gesture comprising an ink object commanding user defined functionality of the system (Claim 14)

determining whether the annotation is associated with a date;
responsive to determining the annotation is associated with a date, determining if a date launch feature is enabled, such that:
in an event no date launch feature is enabled, monitoring the electronic document for additional user annotations;
in an event the date launch feature is enabled, launching an associated application; (Claim 23).

7. Regarding the request for an interview in the event that the reply to the Amendment was anything other than allowance of all pending claims (Remarks, p. 2), an interview was previously held on 05/27/2008, prior to applicant's response. Scheduling a second interview would not be feasible at this time, because new grounds of rejection are set forth, which are presented in written form for the record.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Clary U.S. Patent No. 7,091,959 B1 issued August 2006
(discloses associating an electronic ink entry with a date)

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMELIA RUTLEDGE whose telephone number is (571)272-7508. The examiner can normally be reached on Monday - Friday 9:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AR

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